

ecology and environment, inc.

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MEMORANDUM

DATE:

May 10, 1988

TO:

File

FROM:

Katherine Neswick 💹

SUBJECT:

Illinois/F05-8704-003/FIL0493SI

Chicago Heights/Alco Springs Industries

ILD048300412

Alco Springs Industries is a manufacturer of steel springs for heavy machinery. The company is located at 23rd and Euclid Streets in Chicago Heights. Operations began in 1913 on 42 acres of land as a division of American Locomotive. In 1972, 20 acres were sold to Sun Steel Company, and Alco Springs became part of the Studebaker Corporation.

Steel is the primary feedstock used in their spring manufacturing process. The springs are submerged in quench oil bath to remove the metal scale. The quench oil bath sludge (metal sludge) generated when the quench oil is filtered is regulated as a special waste (F010). The oil is cooled and reused through a quench oil reclaiming system constructed in November 1980. This system utilizes three 275-System gallon oil tanks equipped with baffles to separate the metal scale from the oil. There are several storage tanks within the plant, and one located outside. Approximately 38,000 gallons of quench oil are presently used at the plant. This oil is used repeatedly until volatilized.

Before the new quench oil reclaiming system was constructed in 1980, the oil was cooled with water which was later discharged into Thorn Creek, a nearby recreational stream.



Alco Springs operated an unpermitted landfill until 1981 when it was covered with a 2-ft clay seal. Fill consisted of concrete, empty drums, wood pallets, general waste, scrap steel, and steel grindings. The landfill is located on the west end of the site and slopes 25 ft into standing water and trees. Thorn Creek is in close proximity to the landfill.

The site was first brought to public attention by a complainant, alleging pollution of a tributary to Thorn Creek by discharges from Alco Springs and an adjacent company called Sun Steel. On November 19, 1980, the IEPA investigated the complaint. Another complaint which cited dumping of waste was investigated November 19, 1981. The IEPA obtained soil samples from the fill face and earthen berm area located west of the standing water and trees. Water samples were obtained from Thorn Creek.

On May 12, 1987, Ecology and Environment/FIT conducted an inspection of the site. Alco Springs personnel were interviewed, and the site was visually inspected. Alco Springs personnel were interviewed, and the site was visually inspected. Access to the site is restricted by a fence. However, the fencing is not continuous, and an opening for truck entry is present near the landfill. South Chicago Heights and Park Forest residents rely on groundwater as a source of drinking water. In order to evaluate the quality of the water, FIT collected three water samples. These samples were taken from the South Chicago Heights Water Department, Park Forest Water Department, and nearby Cook County forest preserve well (W-3). Lead and copper were detected in sample W-3.